

MODIS IOT Weekly Report

Mission Operations Days: 2000/120 to 2000/126

April 28, 2000 20:00:00 GMT to May 5, 2000 20:00:00 GMT

Terra Spacecraft and MODIS Instrument Status:

Terra (AM-1) is in Normal Mode

MODIS is in Science Mode

MODIS has no known Anomalies

Blackbody	A On; B Off	Nominal
Calibration Electronics	A On; B Off	Nominal
Control Processor	A On; B Off	Nominal
Door: Nadir	Unlatched, open	Nominal
Space View	Unlatched, open	Nominal
Solar Diffuser	Unlatched, closed	Nominal
FDDI Formatter	A On; B off	Nominal
FIFO Memory	1 & 2 On; 3 & 4 Off	Nominal
Format Processor	A On; B off	Nominal
PC FPA	A On	Nominal
Power Supply: 1	On	Nominal
2	Off	Nominal
PV FPAs: VIS	A On	Nominal
NIR	A On	Nominal
SMIR	A On	Nominal
LWIR	A On	Nominal
Radiative Cooler:		
Outgas Heaters	Off	Nominal
LWIR FPA Heater	On	Nominal
SMIR FPA Heater	Off	Nominal
Scan Assembly	A On; B off	Nominal
SDSM	Off	Nominal
SRCA	Off	Nominal
Survival Heaters: PS1	Enabled	Nominal
PS2	Enabled	Nominal
Timing Generator	A On; B Off	Nominal
Flight Software	Rev BD	Nominal
Inhibit Ids Set	None	Nominal
TMONs enabled	66,67	Nominal

This Week's Completed MODIS Activities:

Friday, April 28, 2000

119/20:45:55 Real-time Open Nadir Aperture Door

119/20:59:47 Real-time Door Table Dump (Table 18)

119/21:02:16 Real-time Clear Inhibit ID #34 (SVD & NAD)

118/21:02:49 Real-time Clear Inhibit ID #58 (Door Power)

Saturday, April 29, 2000

None

Sunday, April 30, 2000

None

Monday, May 1, 2000

122/13:34:34 ATC OA-16 SD/SDSM Screened

122/20:02:00 ATC Blackbody to 270K

122/23:27:50 ATC OA-15 SD/SDSM Open

Tuesday, May 2, 2000

123/14:00:00 ATC Blackbody to 315K

123/16:22 Real-time Set Blackbody duty cycle to 100%

123/21:00:00 ATC Blackbody to 270K

123/21:23 Real-time Set Blackbody duty cycle to 33%

Wednesday, May 3, 2000

124/13:22:01 ATC OA-16 SD/SDSM Screened

124/19:00:00 ATC Blackbody to 290K

124/19:19:58 Real-time Set inhibit ID #54 (SRCA)

124/21:49:54 ATC Turn PC DC Restore OFF

124/21:49:56 ATC Turn PV DC Restore OFF

124/21:49:58 ATC Sector Rotation to -3400

124/22:21:35 ATC Sector Rotation to 0

124/22:21:37 ATC Turn PV DC Restore ON

124/22:21:39 ATC Turn PC DC Restore ON

Thursday, May 4, 2000

125/02:44:54 ATC Turn PC DC Restore OFF

125/02:44:56 ATC Turn PV DC Restore OFF

125/02:44:58 ATC Sector Rotation to -3400

125/03:16:35 ATC Sector Rotation to 0

125/03:16:37 ATC Turn PV DC Restore ON

125/03:16:39 ATC Turn PC DC Restore ON

125/04:37 Real-time Clear inhibit ID #54 (SRCA)

125/08:17:21 -- 10:15:59 ATC OA20: 10W Radiometric (Radiance feedback w/ ND)

125/16:31:43 -- 18:30:21 ATC OA20: 10W Radiometric (Constant Current w/ ND)

Friday, May 5, 2000

126/04:03:18 -- 06:02:28 ATC OA21: 1W Radiometric Continuous (Radiance feedback)

126/13:09:27 ATC OA-16 SD/SDSM Screened

This Week's Scheduled MODIS Activities Not Completed:

124/21:50:00 -- 22:21:33 ATC OA25: SRCA 10W Spatial with Neutral Density filter (inhibited)

125/02:45:00 -- 03:16:33 ATC OA25: SRCA 10W Spatial with Spectral Slit (inhibited)

Both of these activities were inhibited because the SRCA sector delays would not have been effective with the scheduled sector rotation. The DC Restore toggling and sector rotation did occur as scheduled and thus did disrupt normal science data collection during these periods.

Upcoming MODIS Events:

Friday, May 5, 2000

126/22:53:49 -- 23:20:26 ATC OA25: 1W Spatial (position 0)

126/23:30:52 -- 23:57:29 ATC OA25: 1W Spatial (position 3)

Saturday, May 6, 2000

127/00:07:55 -- 00:34:32 ATC OA25: 1W Spatial (position 6)

127/00:45:03 -- 01:11:40 ATC OA25: 1W Spatial (position 1)

127/01:22:06 -- 01:48:43 ATC OA25: 1W Spatial (position 4)

127/01:59:09 -- 02:25:46 ATC OA25: 1W Spatial (position 7)

127/02:36:17 -- 03:02:54 ATC OA25: 1W Spatial (position 2)

127/03:13:20 -- 03:39:57 ATC OA25: 1W Spatial (position 5)

Sunday, May 7, 2000

None

Monday, May 8, 2000

129/12:00:00 ATC Blackbody to 270K

129/16:10:19 - 16:43:52 ATC OA19: SRCA Full Radiometric

Tuesday, May 9, 2000

130/00:24:41 - 02:19:28 ATC OA21: SRCA 1W Radiometric Continuous w/ radiance feedback

130/06:00:00 ATC Blackbody to 280K

130/10:00:00 ATC Blackbody to 285K

130/12:00:00 ATC Blackbody to 290K

130/14:00:00 Real-time Set Blackbody duty cycle to FULL

130/14:00:00 ATC Blackbody to 295K

130/16:00:00 ATC Blackbody to 300K

130/18:00:00 ATC Blackbody to 315K

130/20:00:00 ATC Blackbody to 270K

130/20:00:00 Real-time Set Blackbody duty cycle to THIRD

Wednesday, May 10, 2000

131/14:18:49 - 15:16:20 ATC OA23: SRCA Full Spatial

131/19:00:00 ATC Blackbody to 290K

Thursday, May 11, 2000

None

Friday, May 12, 2000

133/02:31:04 - 03:22:43 ATC OA22: SRCA Full Spectral Part 1 (Macro 18)

133/04:25:50 - 05:00:35 ATC OA22: SRCA Full Spectral Part 2 (Macro 19)

133/05:48:17 - 06:39:33 ATC OA22: SRCA Full Spectral Part 3 (Macro 20)

133/07:43:32 - 08:21:30 ATC OA22: SRCA Full Spectral Part 4 (Macro 21)

Note: Here is an approximate orbit "position" diagram showing where the various OA25 activities on ops days 126 and 127 will begin within the orbit. The 10.2 minute data collection begins 15:54 after the activity start time.

	3	2	1
SUN	4	x	0
	5	6	7

Maneuvers:

Wednesday, May 17, 2000 19:10:00 - Drag make-up maneuver

MODIS Anomalies:

None.

General Instrument Comments:

MODIS is in Science Mode on the A-side with the SVD and NAD open.

MODIS Telemetry Trends:

Telemetry is nominal.

Non-MODIS Significant Events:

None.

Limited Life Item Status:

SRCA 10W Lamp #1: 157.3 of 500 hours

SRCA 10W Lamp #2: 129.4 of 500 hours

SRCA 10W Lamp #3: 138.6 of 500 hours

SRCA 10W Lamp #4: 61.5 of 500 hours

SRCA 1W Lamp #1: 547.5 of 4000 hours

SRCA 1W Lamp #2: 276.3 of 4000 hours

Solar Diffuser Door: 1335 of 3022 Movements

Nadir Aperture Door: 532 of 1316 Movements

Space View Door: 437 of 1316 Movements